



3-Port USB Print Server

Model # APSUSB2

User's Manual

Ver. 2A

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1 Introduction

Congratulations on purchasing your 3-Port USB Print Server. It is the easiest and fastest way to deploy printers on your network.

This compact Print Server uses your network router to connect various computers and printers together. It manages the flow of print files from computers to the connected printers, delivering print jobs to high-performance printers much faster than a file server or a PC acting as a print server can.

The Print Server features a Web-based Configuration Utility, which allows you to set up the Print Server through the web browser easily and quickly. It also includes a powerful software called, **PS-Utility**, a user-friendly program that allows you to configure some basic functions of the Print Server such as performing a factory reset or updating the firmware.

1.1 Package Contents

Unpack the package and check all the items carefully, and be certain that you have:

- One 3-Port USB Print Server
- One AC Power Adapter
- One Quick Installation Guide
- One Installation CD containing the PS-Utility program and the User's Manual

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packaging materials in case you need to ship the unit in the future.

1.2 System Requirements

Operating System:

- Microsoft Windows 95/98/ME/NT/2000/XP/2003
- Apple Mac OS (with Apple Talk support)

For Web Configuration:

- Java-enabled web browser, such as Microsoft® Internet Explorer 5.0 or Netscape Navigator 6.0

2 Hardware Installation

2.1 Connecting the Print Server

Warning: Only a USB printer may be connected to the USB port of the Print Server. Connecting any other USB device to the Print Server may damage the Print Server.

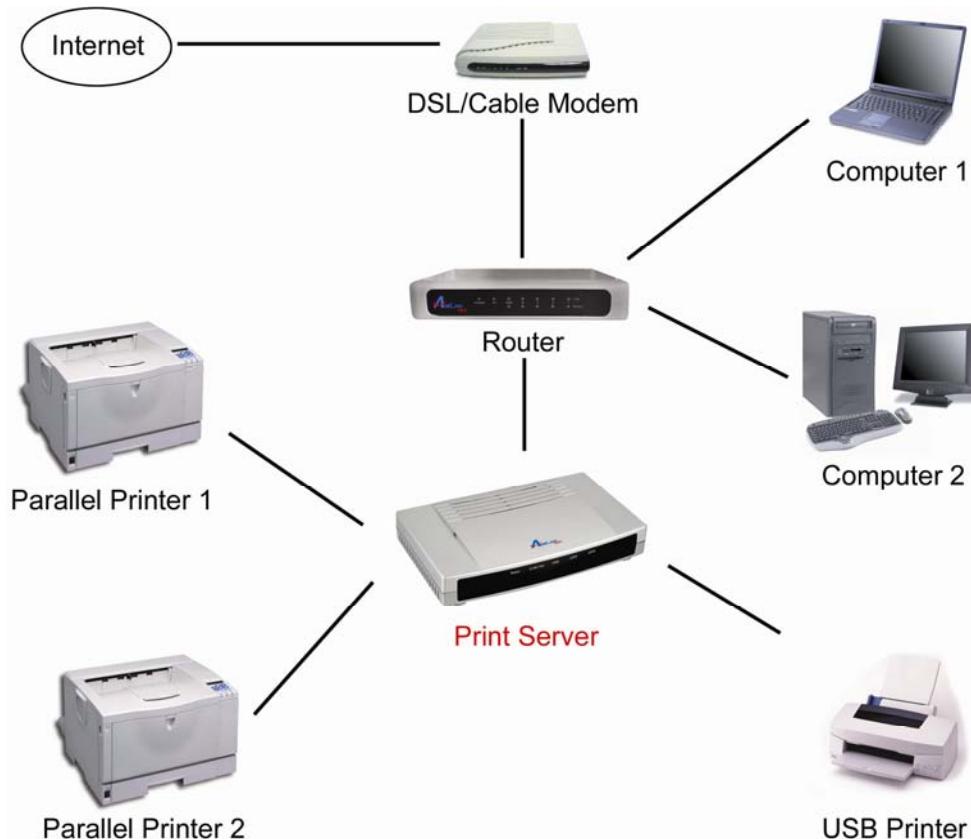
Note: Do not plug the power cord to the Print Server until you have reached **Step 4** of this section.

Step 1 Connect one end of the Ethernet cable to the RJ-45 port of the Print Server and attach the other end of the cable to a router.

Step 2 Make sure all the printers are powered **OFF**, then connect one end of the printer cable to the printer port of the Print Server and attach the other end of the cable to the printer port of the printer.

Step 3 Power **ON** the printer(s).

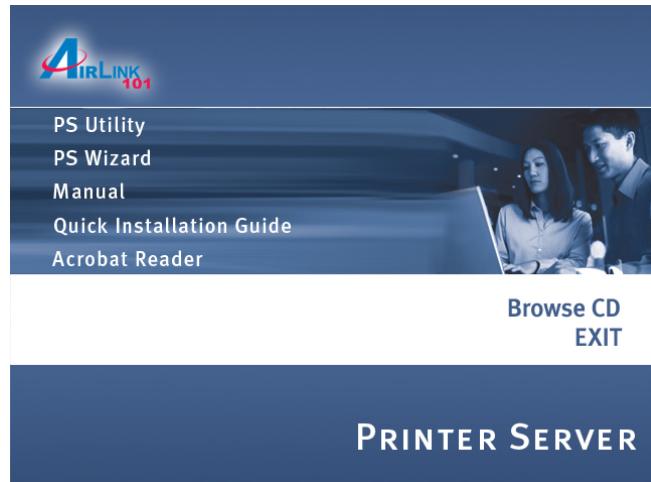
Step 4 Plug one end of the power cord into the Print Server and the other end into an electrical outlet.



3. Installing PS Utility

Step 1 Insert the provided CD and wait for the setup menu to appear.

Step 2 Click on **PS Utility**.

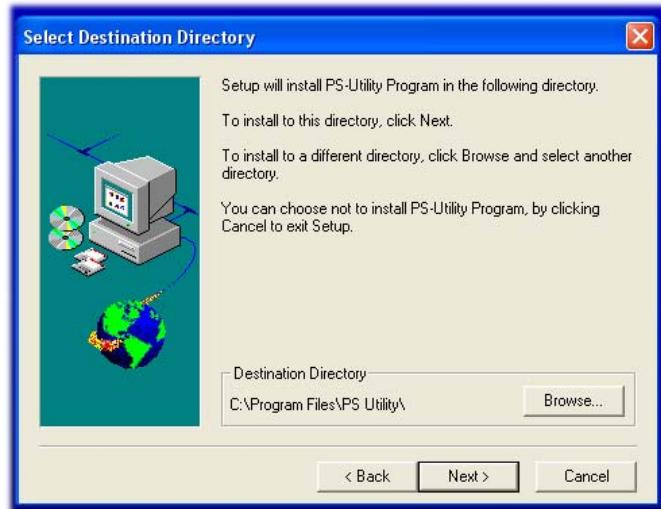


Note: If the setup menu does not appear automatically after you have inserted the CD, go to **Start, Run**, type **D:\autorun.exe** (where **D** is the letter of your CD drive) and click **OK**.

Step 3 Click **Next**.



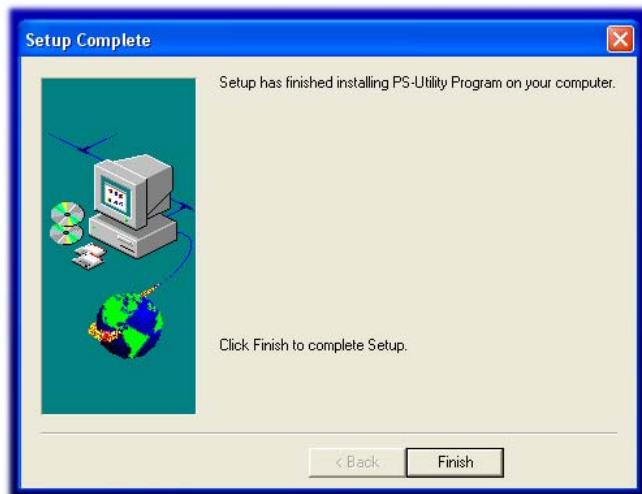
Step 4 Click Next.



Step 5 Click Yes.



Step 6 Click Finish.



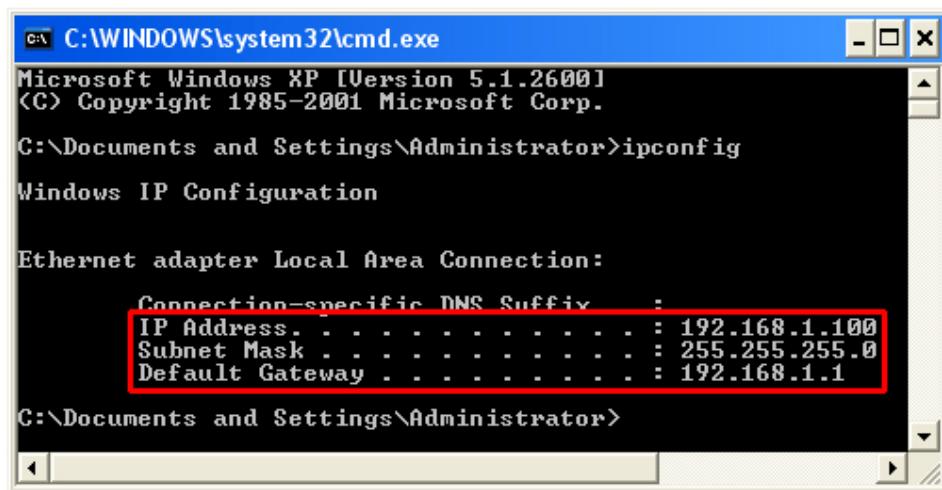
4. Configuring Network Setting

Before configuring the Print Server's network setting, please take note of your computer's TCP/IP setting.

Step 1 Click on **Start**, **Run**, and type **command** (for Windows 95/98/ME) or **cmd** (for Windows 2000/XP) and click **OK**.

Step 2 At the command prompt, type **ipconfig** and press **Enter**.

Step 3 Write down the information for the **IP Address**, **Subnet Mask**, and **Default Gateway**. You will need these information later.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig

Windows IP Configuration

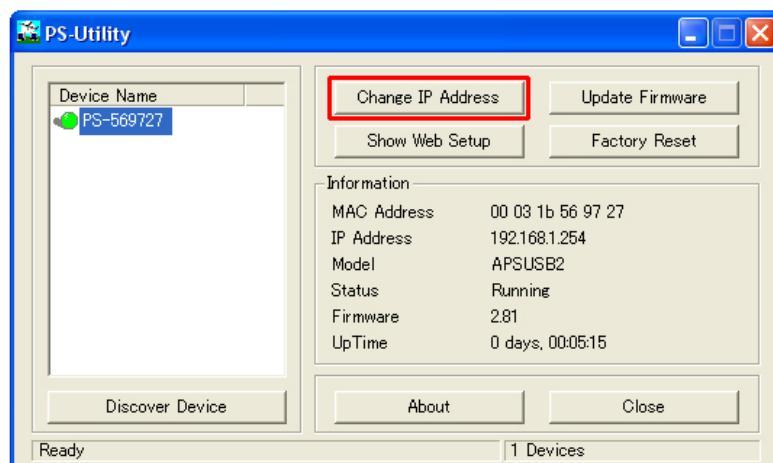
Ethernet adapter Local Area Connection:

  Connection-specific DNS Suffix  : 
  IP Address. . . . . : 192.168.1.100
  Subnet Mask . . . . . : 255.255.255.0
  Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Administrator>
```

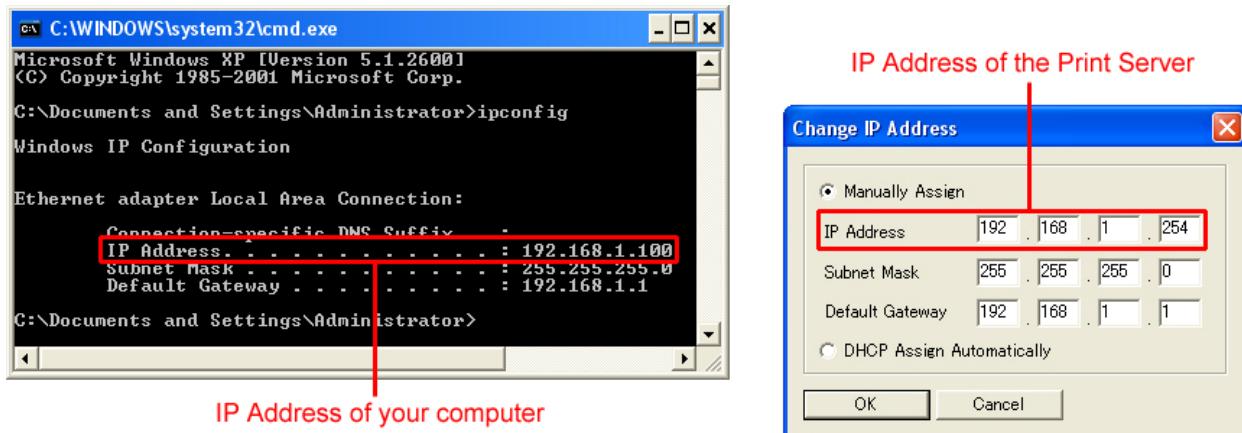
Step 4 Run the PS Utility by going to **Start, (All) Programs, PS Utility, PS Utility v2.00**.

Step 5 Make sure the Print Server is listed under the **Device Name** and click on **Change IP Address**.



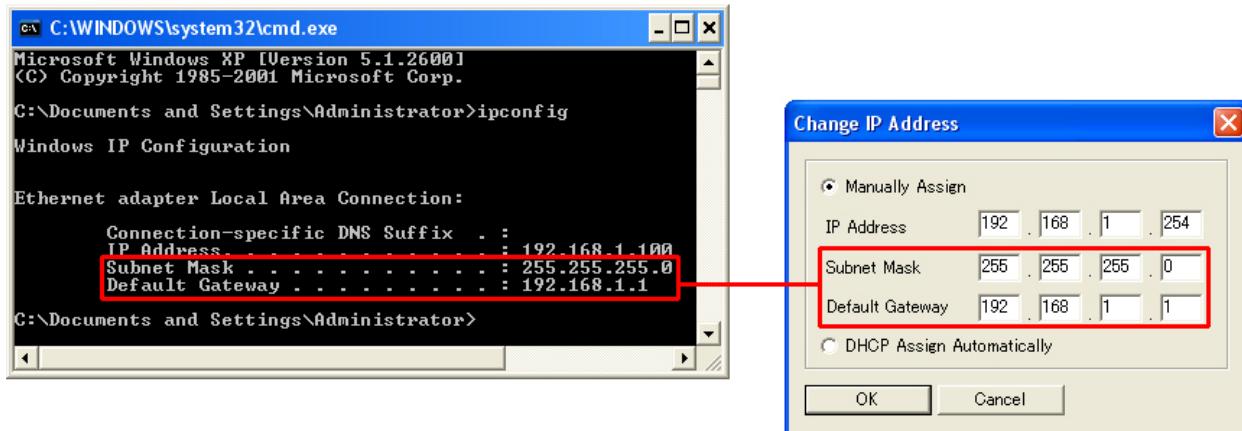
Step 6 In the **IP Address** field, enter a valid IP address, subnet mask, and default gateway that matches your local area network.

For example: If your computer's **IP Address** is **192.168.1.100**, enter the same three numbers: **192.168.1** in the corresponding fields.



Note: You can leave the last IP Address number **254** as is unless another network device (i.e. the **Default Gateway**) is already using that number. If another network device is already using **254**, then change it to another number that is currently not in use (preferably **200 - 253**).

For the **Subnet Mask** and **Default Gateway** fields, enter the same number as the TCP/IP setting of your computer.



Step 7 Click **OK**.

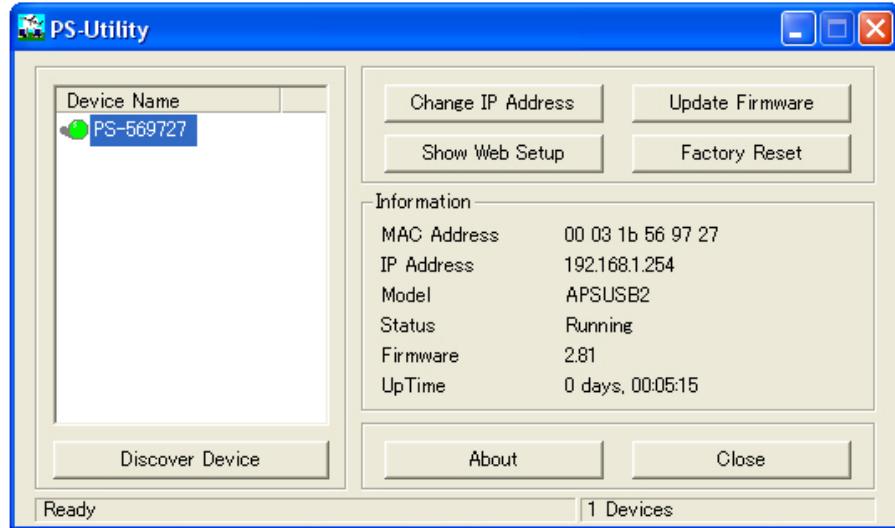
Step 8 Close the PS Utility program.

5. Verifying Network Connection

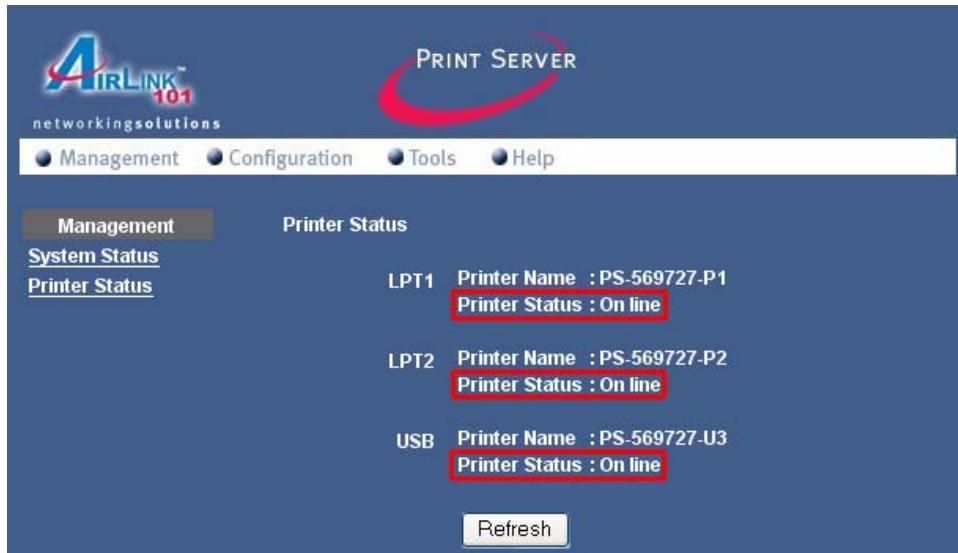
Step 1 Run the PS Utility by going to **Start, (All) Programs, PS Utility, PS Utility v2.00.**

Step 2 Make sure the Print Server is detected under the **Device Name**.

Step 3 Click on **Show Web Setup** to display the Print Server's **Web Configuration Utility**.

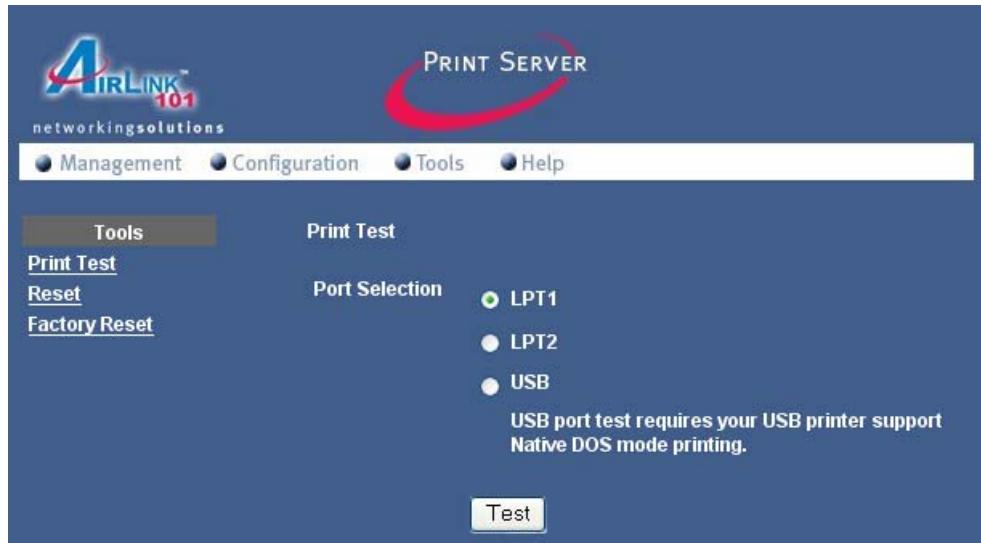


Step 4 Click on the **Management** link and select **Printer Status**. Make sure the **Printer Status** for each of the connected ports displays **On line**.



Step 5 Click on the **Tools** link and select the port that a printer is connected to and click the **Test** button. The Print Server will perform a low-level print test, bypassing the

operating system layer. Perform the print test for each port that has a printer connected to it.



Note: Your printer should print out a test page. If not, verify that the printer is powered on and all cables are securely connected and try again. If the printer still fails to print a test page, please check the printer compatibility list on our web site at www.airlink101.com for a list of compatible printers. If your printer is not on the list, it may not be compatible with the Print Server.

Step 6 Once the printer successfully prints out a test page, you may close the web browser and proceed to the next section.

6. Running PS Wizard

Warning: Make sure you have installed the printer driver locally on every computer in your network before running the PS Wizard. Otherwise, the PS Wizard will not run properly. Be sure to run the PS Wizard on all the computers in your network.

Step 1 Insert the provided CD and wait for the setup menu to appear.

Step 2 Click on **PS Wizard**.



PS Utility
PS Wizard
Manual
Quick Installation Guide
Acrobat Reader



[Browse CD](#)
[EXIT](#)

PRINTER SERVER

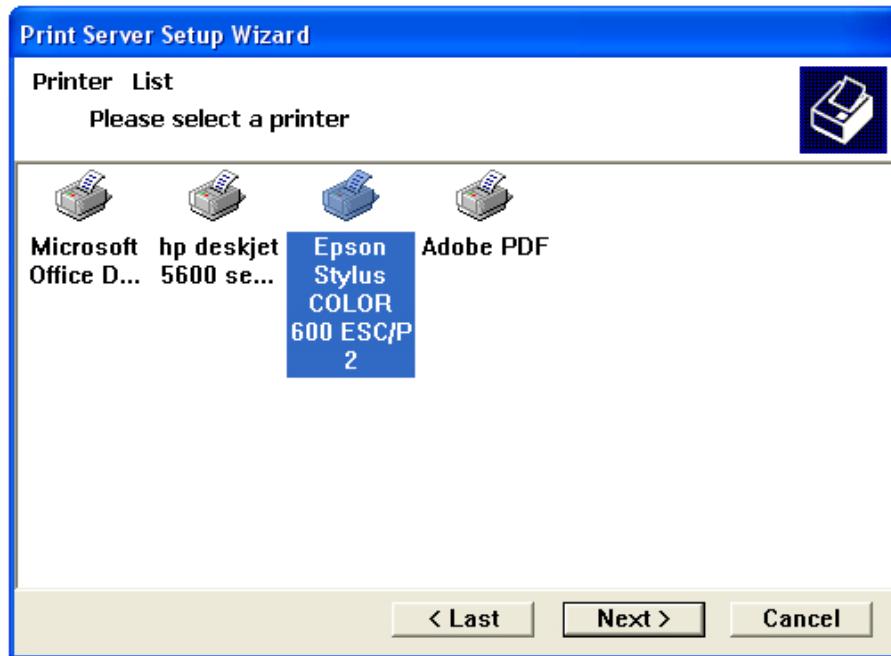
Note: If the setup menu does not appear automatically after you have inserted the CD, go to **Start, Run**, type **D:\autorun.exe** (where **D** is the letter of your CD drive) and click **OK**.

Step 3 Click **Next**.

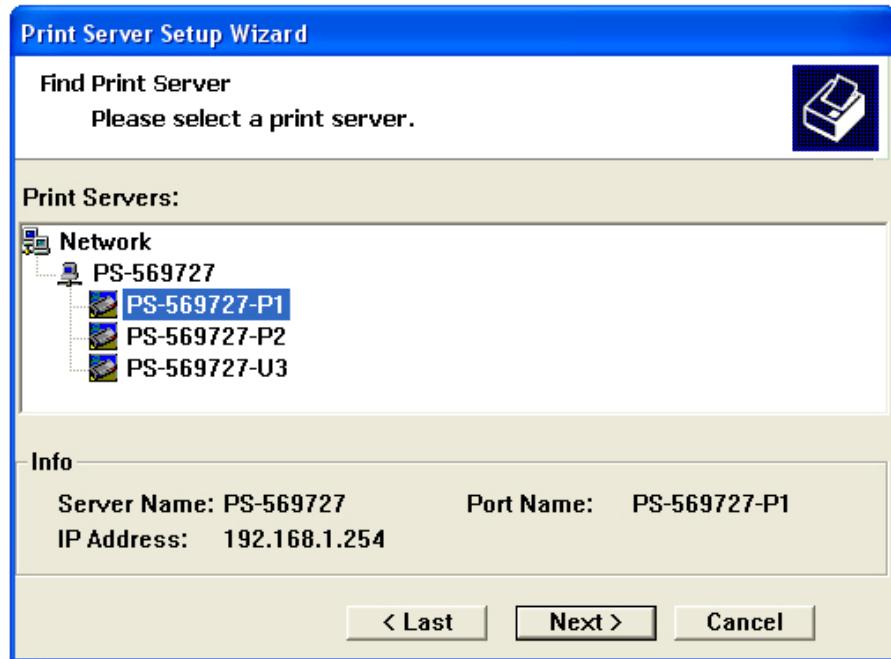


Step 4 Select a printer that is connected to the Print Server and click **Next**.

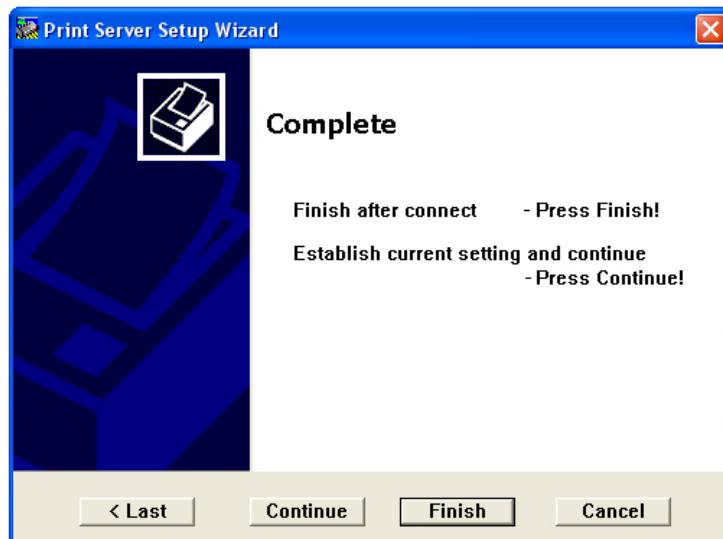
Note: If you have more than one printer connected to the Print Server, you'll need to re-run the **PS Wizard** again to setup the other printers.



Step 5 Double-click on the **Print Server Name**, select the **Printer Port** that the printer is connected to, and click **Next**.



Step 6 Click **Reboot** (for Windows 95/98/ME) or **Finish** (for Windows 2000/XP).



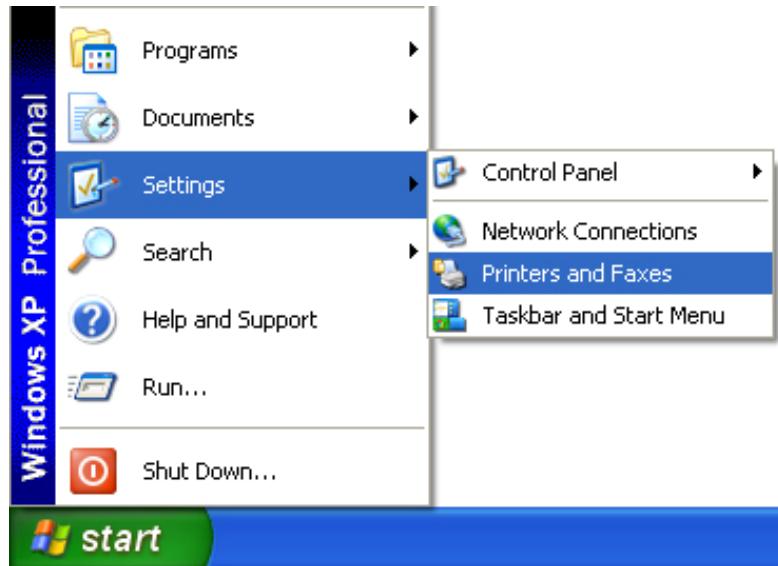
Step 7 Re-run the **PS Wizard** and setup any remaining printer(s) that are connected to the Print Server.

Step 8 Run the **PS Wizard** on all the computers in your network that will use the Print Server.

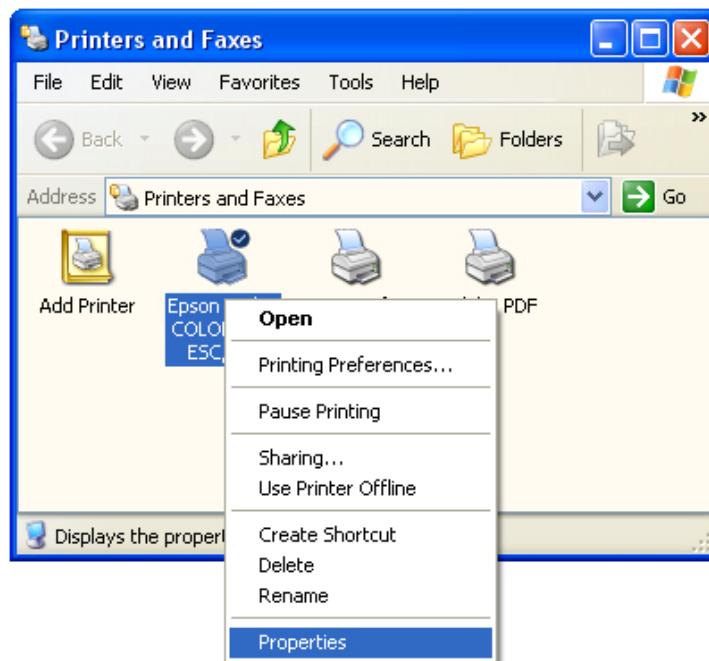
7. Performing Operating System Print Test

The final step in setting up the Print Server is to perform an operating system print test. Please note that the instructions below are for Windows XP, but the steps are similar for all the other Windows operating systems.

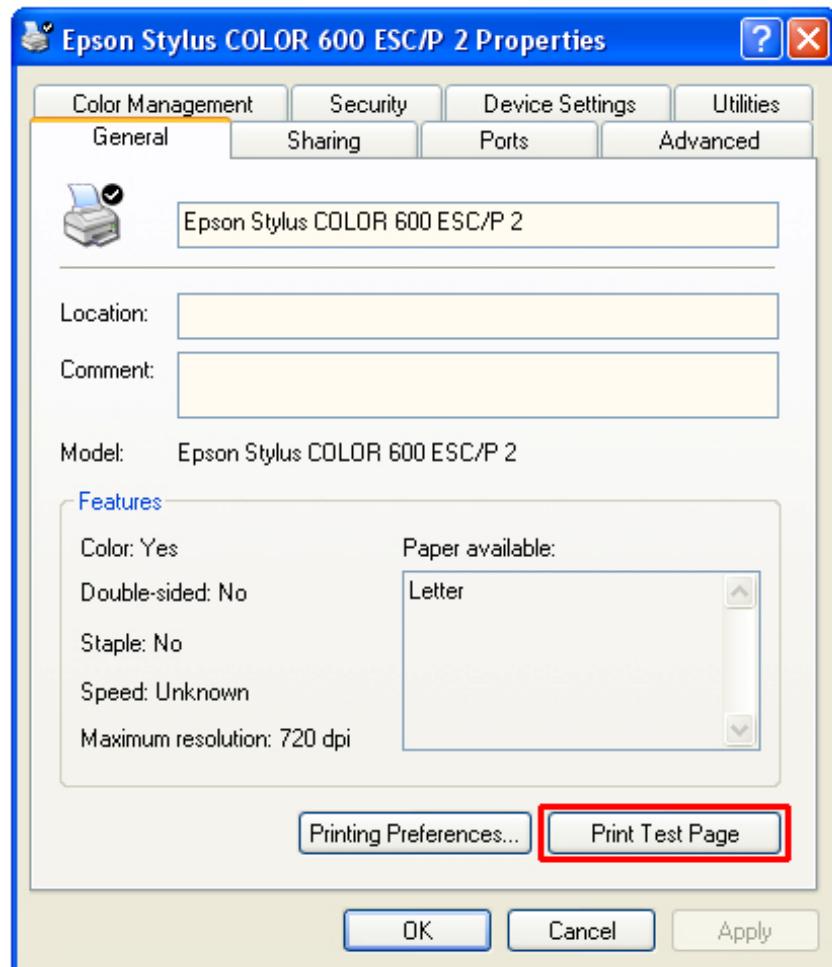
Step 1 Click on **Start, Settings, Printers and Faxes**.



Step 2 Right-click on the printer that is connected to the Print Server and select **Properties**.



Step 3 Click on the **Print Test Page** button. Windows should print out a test page.



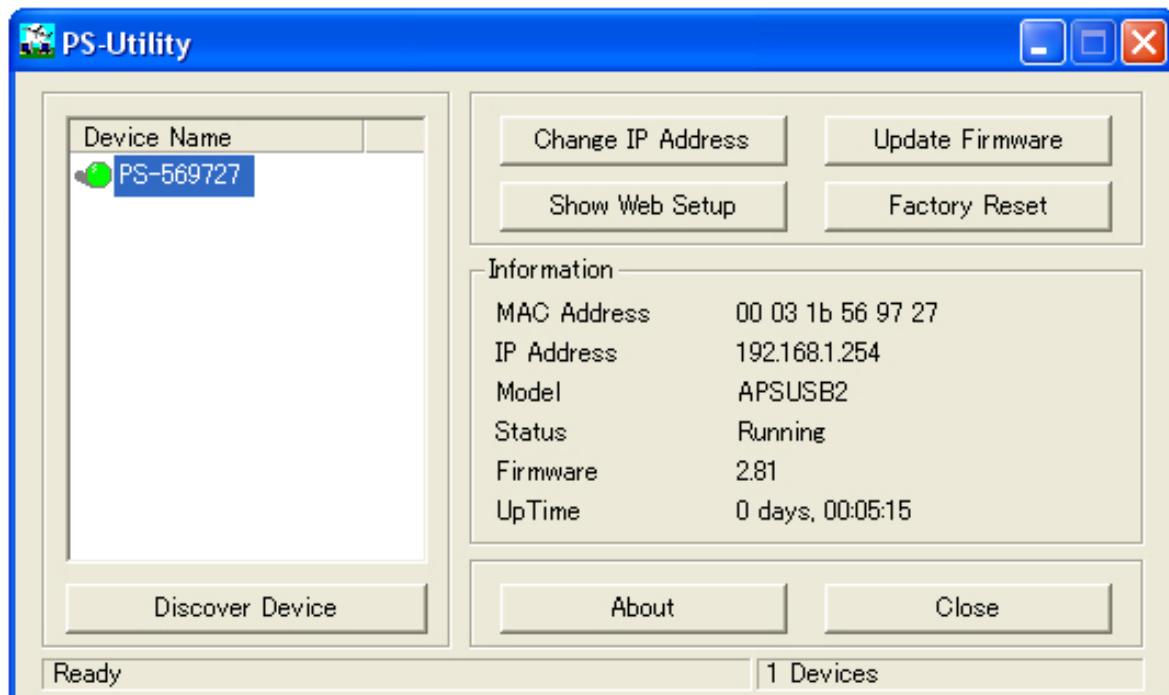
You have successfully configured the Print Server for printing.

8. Using the PS-Utility

PS-Utility is a user-friendly program that allows you to configure some basic functions of the Print Server such as performing a factory reset or updating the firmware. To access the complete management features of the Print Server, you'll need to use the **Web Configuration Utility**, which is described in the next section.

Note: If you haven't installed **PS-Utility** yet, please follow the installation instructions as described in **Section 3, Installing PS-Utility**.

You can start PS-Utility by going to **Start, (All) Programs, PS Utility, PS Utility v2.00**.



Device Name: Lists any Print Server that is connected on your network.

Information: Displays the basic information for the selected Print Server.

Discover Device: Click on this button to automatically search for any Print Server that is connected to your network.

Change IP Address: Click on this button to change the IP Address and other TCP/IP settings for the Print Server.

Update Firmware: Click on this button to update the Print Server's firmware.

Note: You must download the updated firmware from www.airlink101.com first.

Show Web Setup: Click on this button to display the Web Configuration Utility.

Factory Reset: Click on this button to reset the Print Server back to factory settings.

About: Click on this button to display the version number of the PS-Utility.

Close: Click on this button to close PS-Utility.

9. Using the Web Configuration Utility

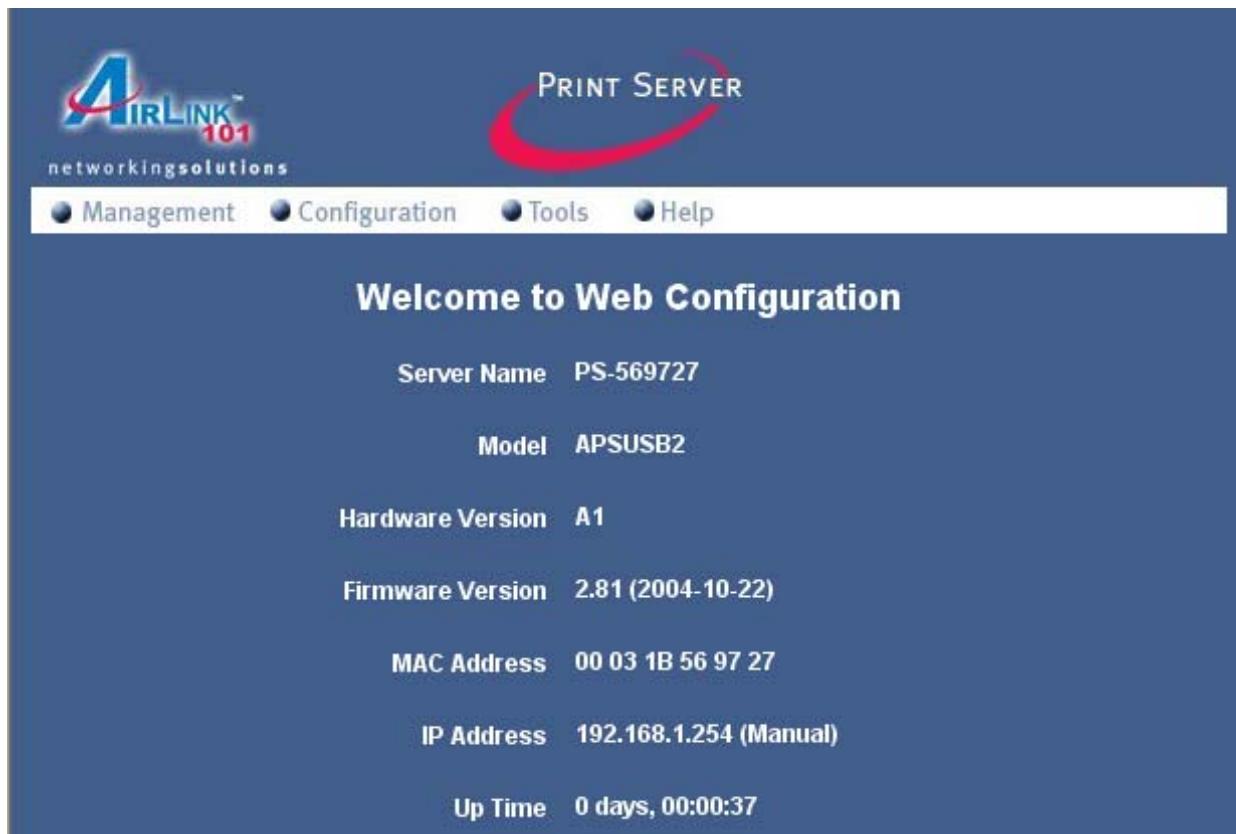
The **Web Configuration Utility** allows you to manage the full features of the Print Server with an easy-to-use user interface.

You can start the **Web Configuration Utility** in two ways:

1. Click on the **Show Web Setup** button in **PS-Utility**.
2. Open your web browser, type in the IP address of the Print Server in the URL address field, and press **Enter**. (Default IP address is **192.168.1.254**).

The **Web Configuration Utility** will display the welcome page.

Click on any of the links to display the corresponding page.

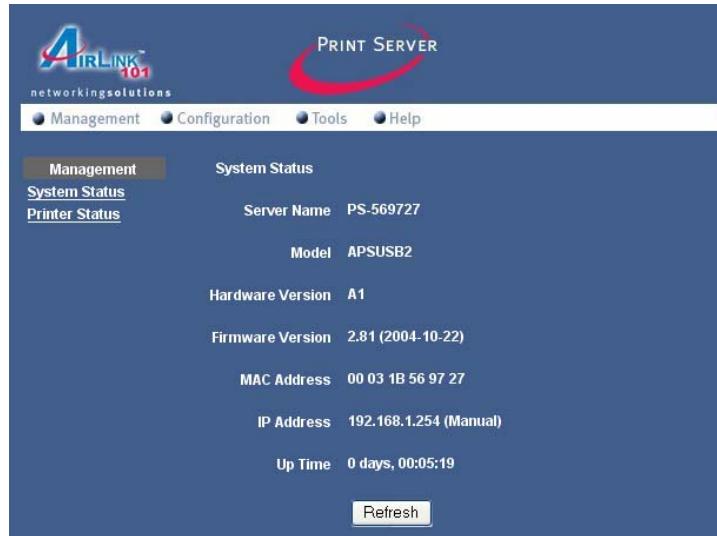


9.1 Management

Click on **Management** to display the Management page.

System Status

The **System Status** page displays basic information about the Print Server.



Click on **Refresh** to update the page.

Printer Status

The **Printer Status** page displays the status of the printer that is connected to the Print Server.



If the Print Server detects the connected printer, the **Printer Status** will display **On line**.

Click on **Refresh** to update the page.

9.2 Configuration

Click on **Configuration** to display the Configuration page.

Server Device

The **Server Device** page allows you to configure basic settings of the Print Server.

PRINT SERVER

Management Configuration Tools Help

Configuration Server Device

Server Name: PS-569727

Location: [empty]

Admin Contact: [empty]

Password: New Password: [empty]
Confirm Again: [empty]

LPT1 Port Name: PS-569727-P1
Description: [empty]
Speed: High
PJL Printer: No

LPT2 Port Name: PS-569727-P2
Description: [empty]
Speed: High
PJL Printer: No

USB Port Name: PS-569727-U3
Description: [empty]
PJL Printer: No

Save Cancel

Server Name: You can rename the Print Server to a more user-friendly name or keep the factory default name.

Location: You can make note of where the Print Server is located (optional).

Admin Contact: Name of the administrator to contact for help (optional).

Password: You can set a password for the **Web Configuration Utility** so only authorized personnel can access and change the Print Server's configuration.

LPT1, LPT2, and USB: You can rename the Print Server's port name to a more user-friendly name

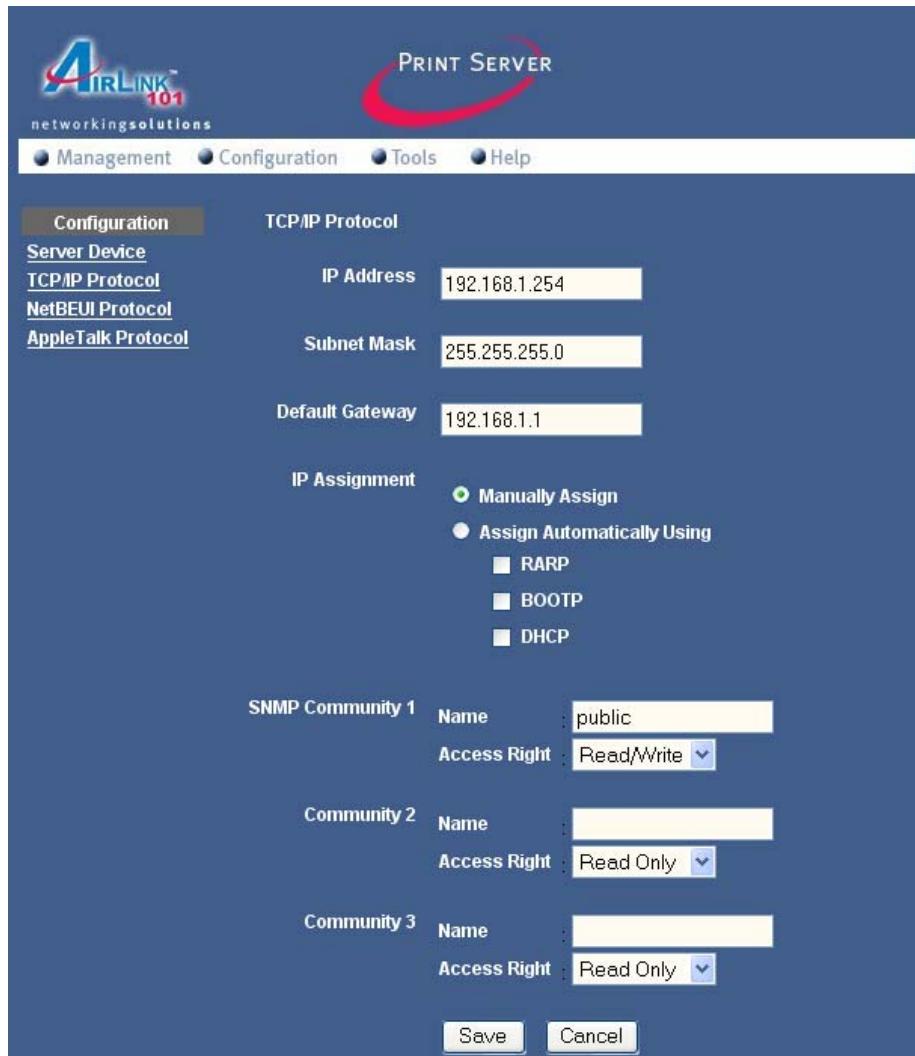
Speed: Select the printer port's speed.

PJL Printer: Choosing **Yes** will enable the support for Hewlett-Packard PJL (Printer Job Language) standard for bi-directional printing. (Default is **No**).

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

TCP/IP Protocol

The **TCP/IP Protocol** page allows you to configure the TCP/IP setting of the Print Server.



The screenshot shows the AIRLINK 101 Print Server configuration interface. The top navigation bar includes 'Management', 'Configuration' (which is selected), 'Tools', and 'Help'. The main menu on the left is 'Configuration' (selected), with sub-options 'Server Device', 'TCP/IP Protocol' (selected), 'NetBEUI Protocol', and 'AppleTalk Protocol'. The 'TCP/IP Protocol' section contains fields for 'IP Address' (192.168.1.254), 'Subnet Mask' (255.255.255.0), and 'Default Gateway' (192.168.1.1). The 'IP Assignment' section has a radio button for 'Manually Assign' (selected) and another for 'Assign Automatically Using' with options 'RARP', 'BOOTP', and 'DHCP'. The 'SNMP Community' section lists three entries: 'Community 1' with 'Name' (public) and 'Access Right' (ReadWrite), 'Community 2' with 'Name' (empty) and 'Access Right' (Read Only), and 'Community 3' with 'Name' (empty) and 'Access Right' (Read Only). At the bottom are 'Save' and 'Cancel' buttons.

IP Address: Assign an IP address for the Print Server or keep the default.

Subnet Mask: Assign a Subnet Mask for the Print Server or keep the default.

Default Gateway: Assign a Default Gateway for the Print Server or keep the default.

IP Assignment: Choose to manually assign an IP address for the Print Server

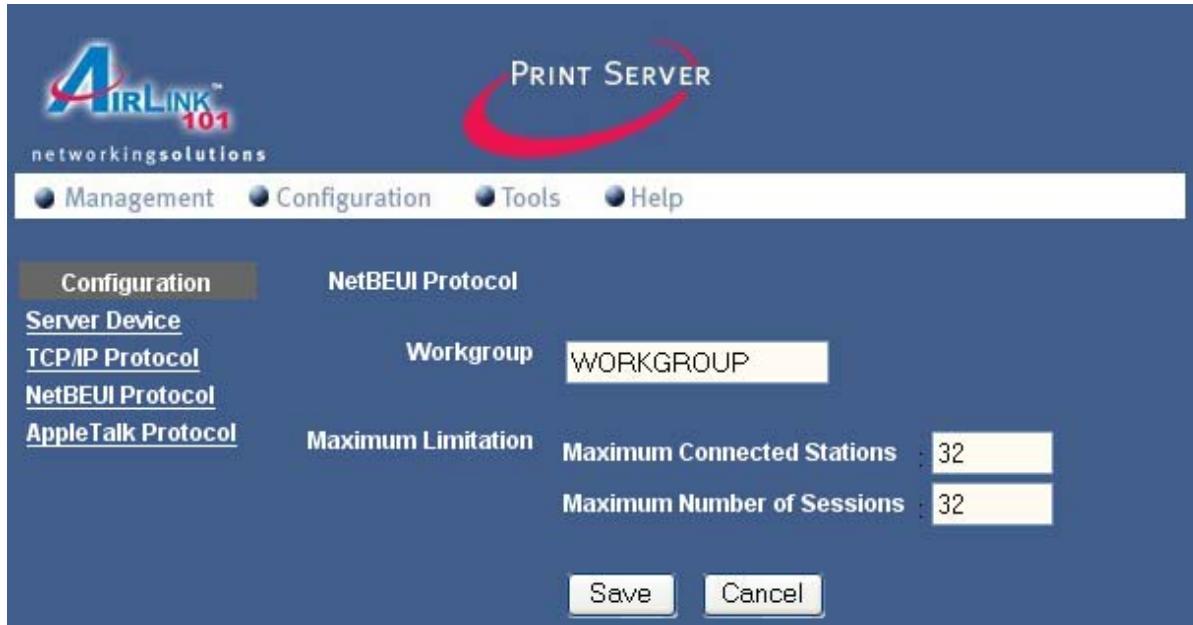
(strongly recommended), or to obtain an IP address automatically using **RARP**, **BOOTP**, or **DHCP**.

SNMP: You can set up to 3 SNMP Communities.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

NetBEUI Protocol

The **NetBEUI Protocol** page allows you to configure the NetBEUI setting of the Print Server.



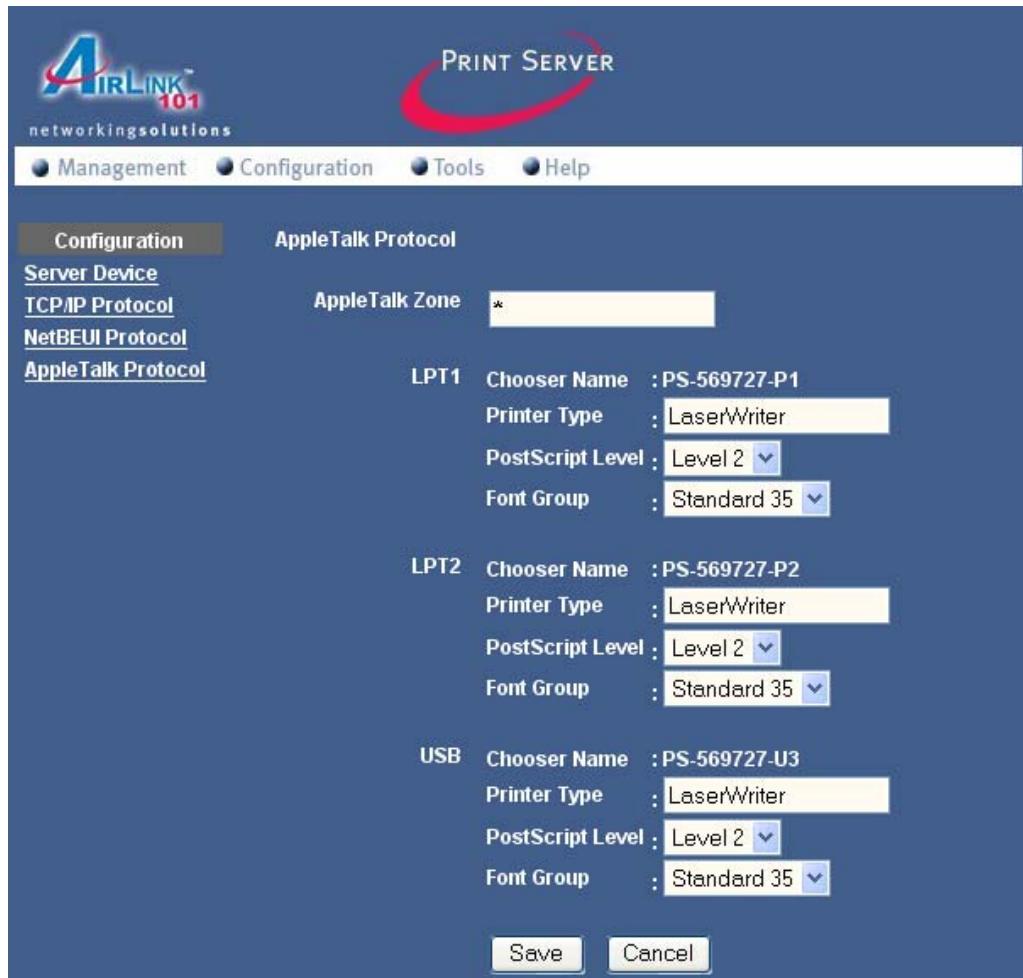
Workgroup: Enter the name of your NetBEUI workgroup.

Maximum Limitation: Set the maximum limitation for **Connected Stations** and **Number of Sessions**.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

AppleTalk

The **AppleTalk Protocol** page allows you to configure the AppleTalk setting of the Print Server.



The screenshot shows the AIRLINK 101 Print Server configuration interface. The top navigation bar includes links for Management, Configuration, Tools, and Help. The Configuration tab is selected, and the sub-menu shows Server Device, TCP/IP Protocol, NetBEUI Protocol, and AppleTalk Protocol, with AppleTalk Protocol currently selected. The main content area is titled "AppleTalk Protocol". The "AppleTalk Zone" field is set to an empty string. Below it, three printer ports are listed: LPT1, LPT2, and USB. Each port has the following configuration fields:

Port	Chooser Name	Printer Type	PostScript Level	Font Group
LPT1	PS-569727-P1	LaserWriter	Level 2	Standard 35
LPT2	PS-569727-P2	LaserWriter	Level 2	Standard 35
USB	PS-569727-U3	LaserWriter	Level 2	Standard 35

At the bottom of the configuration panel are "Save" and "Cancel" buttons.

AppleTalk Zone: Enter the name of your AppleTalk Zone.

LPT1, LPT2, USB: Enter your printer type for each port.

PostScript Level: Select your PostScript level.

Font Group: Select your Font Group.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

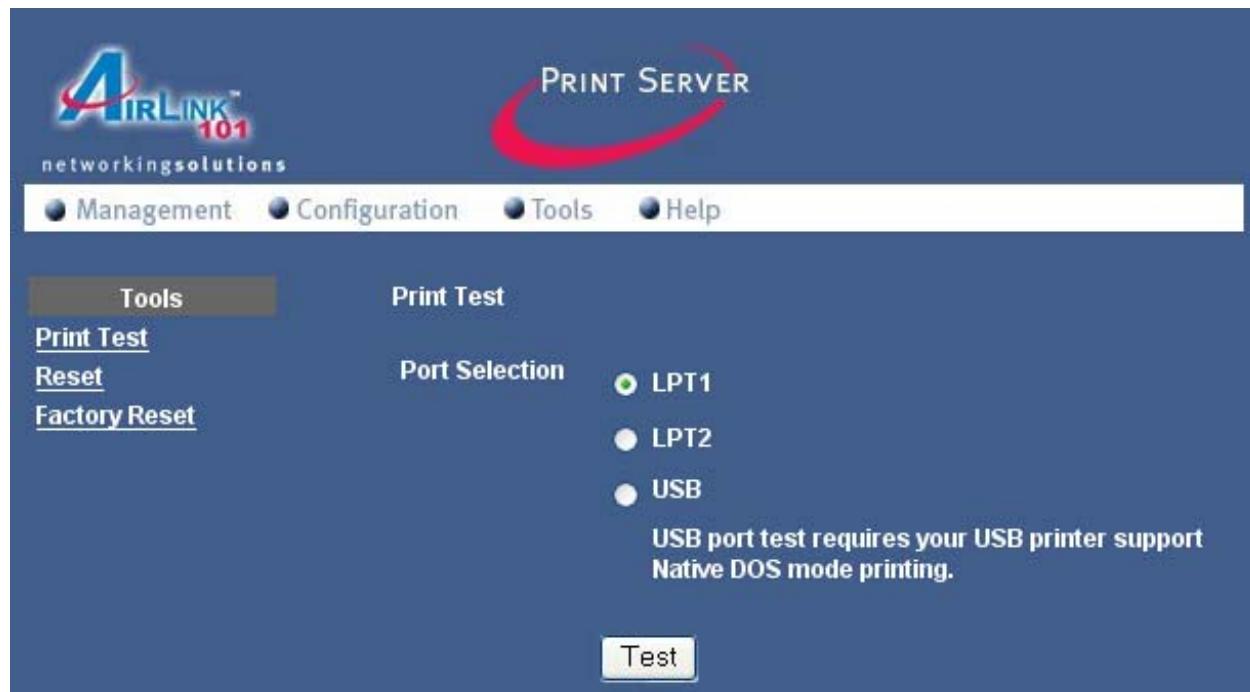
Note: If you are using Mac OS X, you can use **Rendezvous** to connect to the Print Server. For more information on how to use Rendezvous, please see **Section 10.1, Using Rendezvous**.

9.3 Tools

Click on **Tools** to display the Tools page.

Print Test

The **Print Test** page allows you to perform a low-level print test, which bypasses the operating system layer. The test page is sent directly from the Print Server to the printer. This allows you to test the compatibility of your printer with the Print Server.

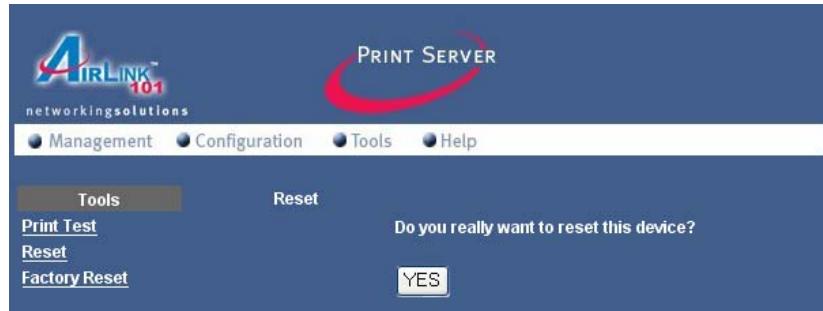


Select the port that the printer is connected to and click on the **Test** button.

Your printer should print out a test page. If not, verify that the printer is powered on and all cables are securely connected and try again. If the printer still fails to print a test page, please check the printer compatibility list on our web site at www.airlink101.com for a list of compatible printers. If your printer is not on the list, it may not be compatible with the Print Server.

Reset

The **Reset** page lets you reset the Print Server without changing the setting back to factory default.



Click on the **Yes** button to reset the Print Server.

Factory Reset

The **Factory Reset** page lets you reset the Print Server's setting back to factory default.



9.4 Help

Click on **Help** to display the Help page.

About

The **About** page displays the Print Server's firmware version number.



10. Printing in Mac OS

This section describes how to set up your Mac OS settings to work with the Print Server.

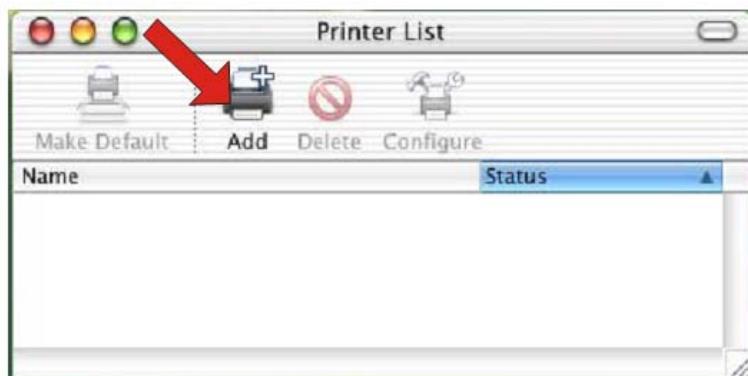
10.1 Using Rendezvous

Mac OS X provides a new feature called **Rendezvous**. Rendezvous is a networking technology standard that lets you create an instant network of computers and devices to share files and printers and even contact other people on the network.

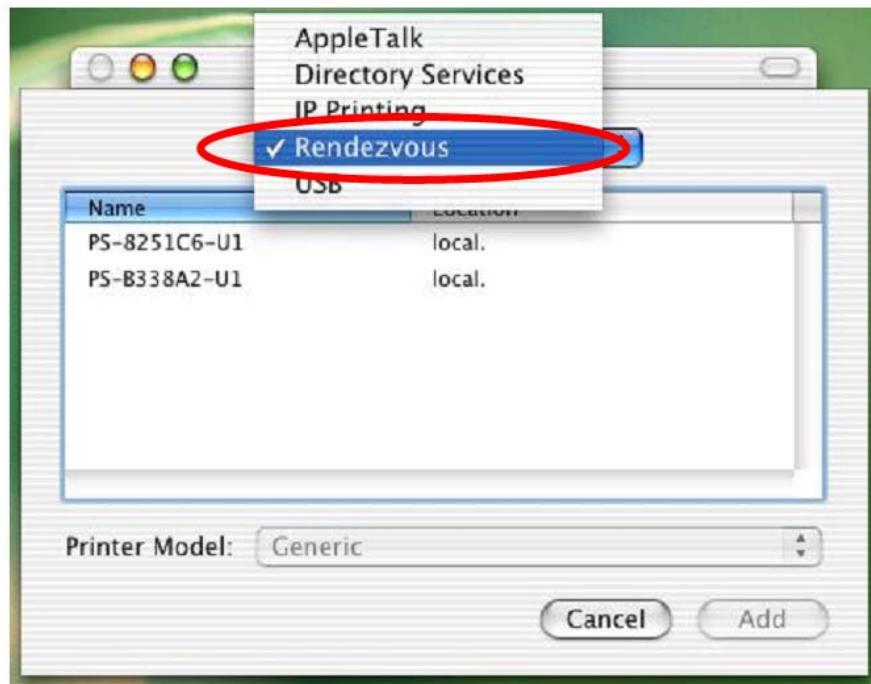
For the printer connection, the Mac OS X Print Center application uses Rendezvous to discover Rendezvous-enabled printers on the network. When you add your computer to a network, Print Center automatically discovers any available printer. All you have to do is select the one you want to use and then start printing. You can add a new printer to the network and all the users on the network will see the new printer automatically appear in their Print Center without any configuration.

The following instructions provide a common way of using Rendezvous:

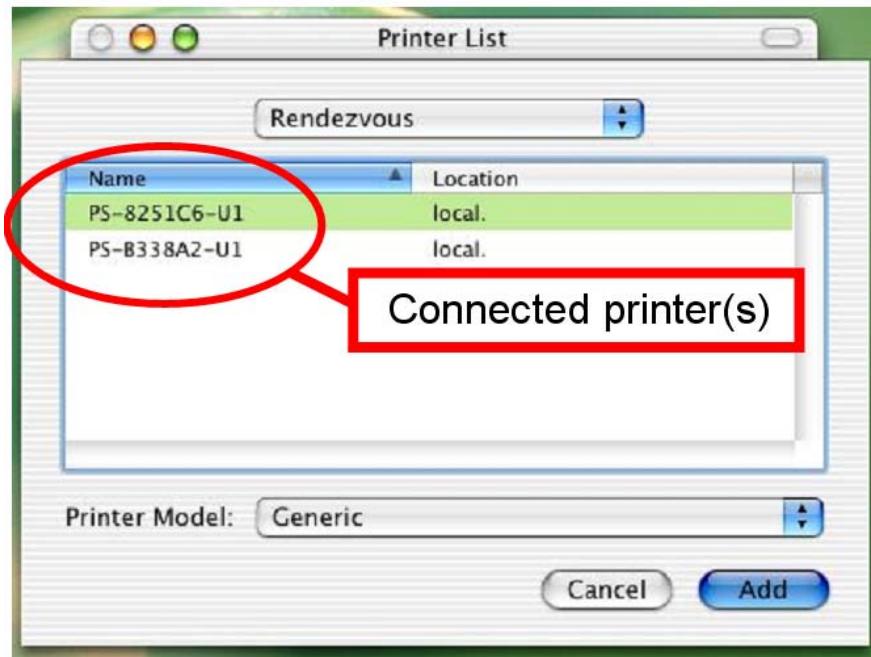
Step 1 Launch **Print Center**. Press and hold the **Option** key and click the **Add** button.



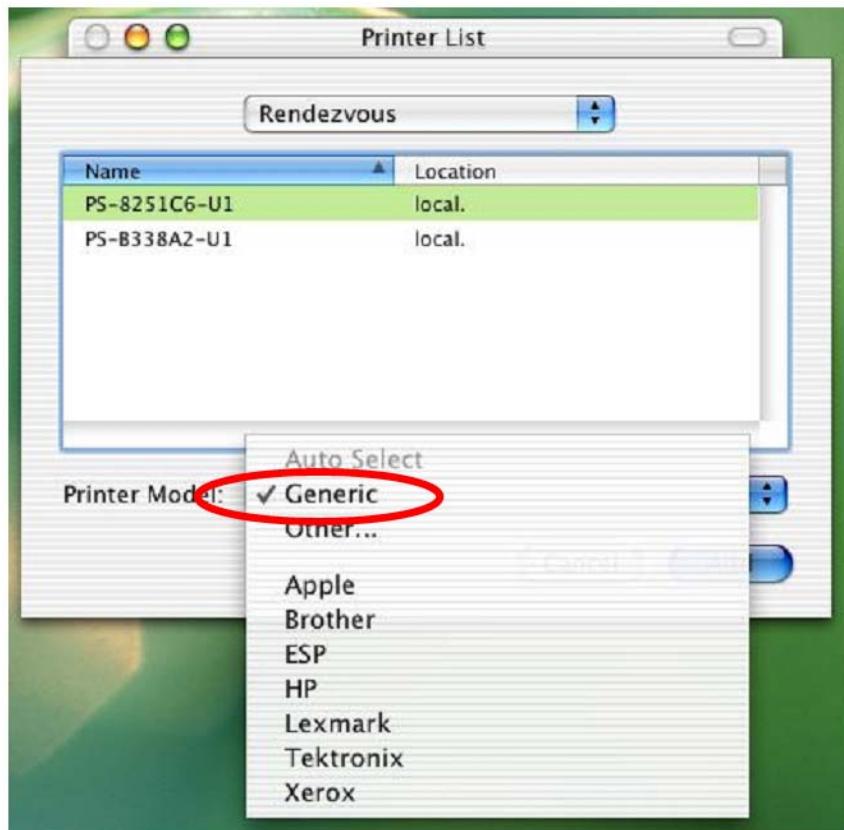
Step 2 Select **Rendezvous** from the pop-up menu.



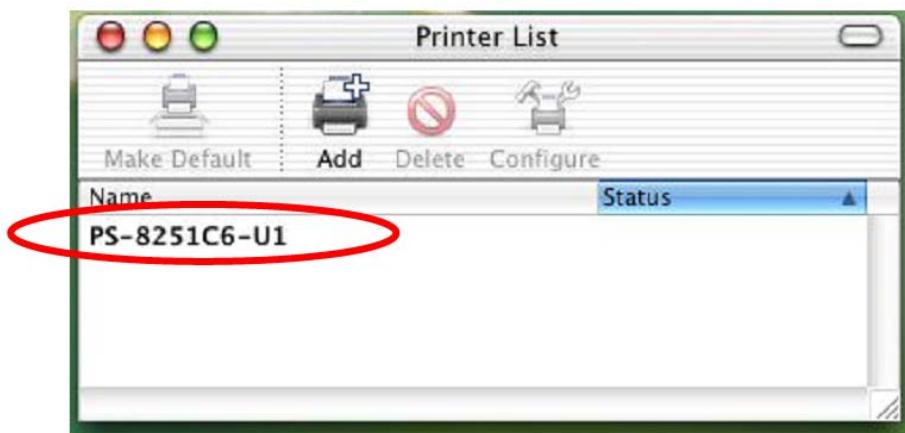
Step 3 A list of Rendezvous-enabled printers will appear in the list.



Step 4 Choose the desired printer and select **Generic**.



Step 5 The printer is installed into the system successfully.



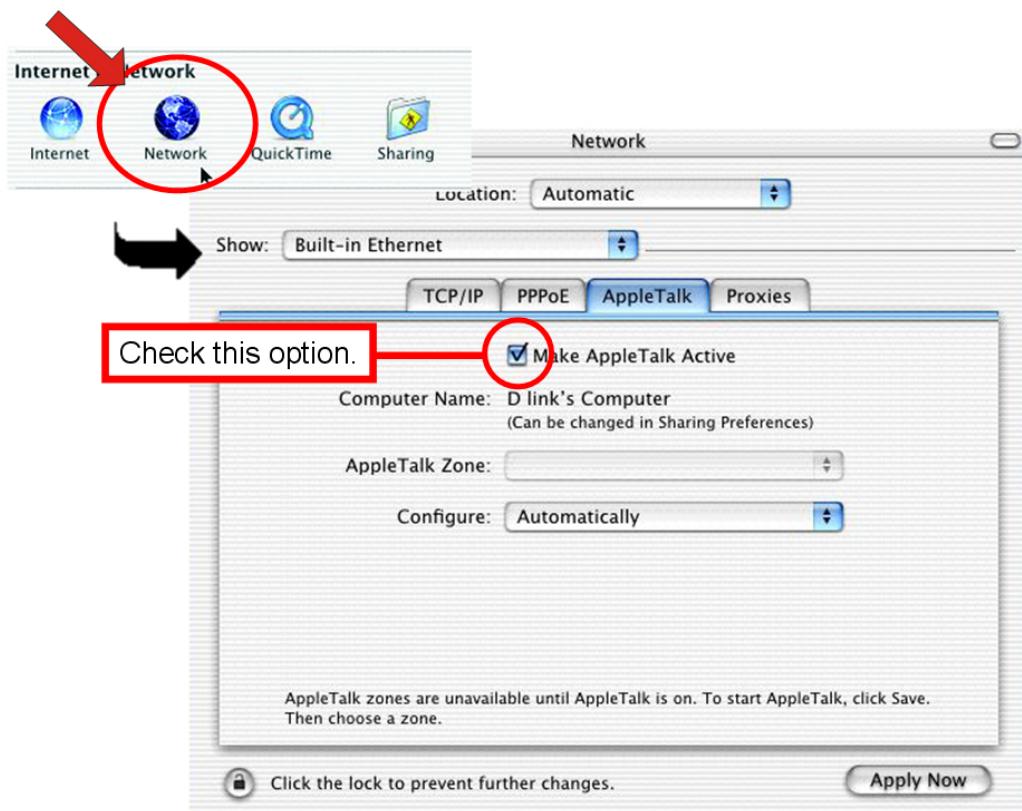
10.2 Setting AppleTalk/LPR Printing

If you want to use **AppleTalk** or **LPR** printing instead of **Rendezvous**, Follow the instructions below.

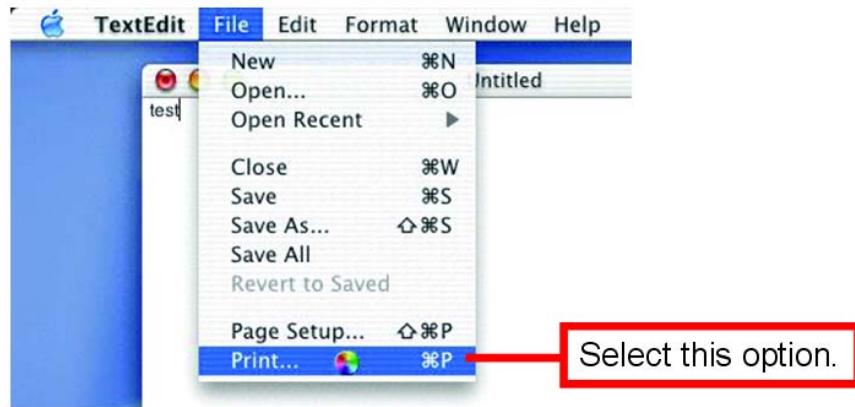
For Mac OS X

Step 1 After attaching the Print Server to your network, change the IP Address of your Macintosh computer in order to access the Print Server's Web Configuration Utility. The default IP Address of the Print Server is **192.168.1.254**. Change your IP Address to **192.168.1.x**, where **x** is any number between 2 and 200.

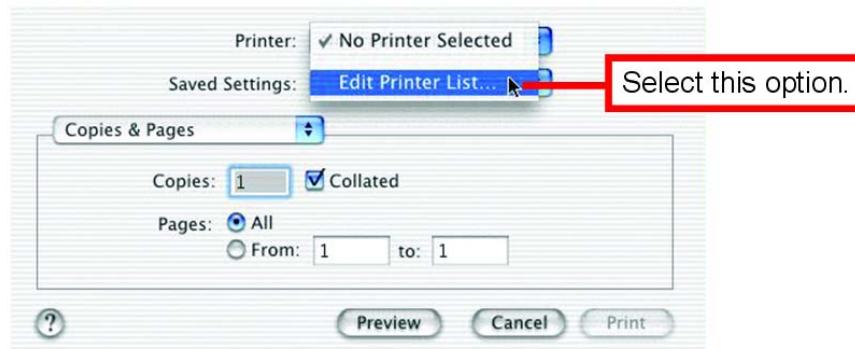
Step 2 Open the **System Preference** window and click **Network**. In the Network window, select the **AppleTalk** tab and check the **Make AppleTalk Active** check box.



Step 3 To print, open a document and select **File > Print** from the menu.



Step 4 Select **Edit Printer List** from the **Printer** dialog box.

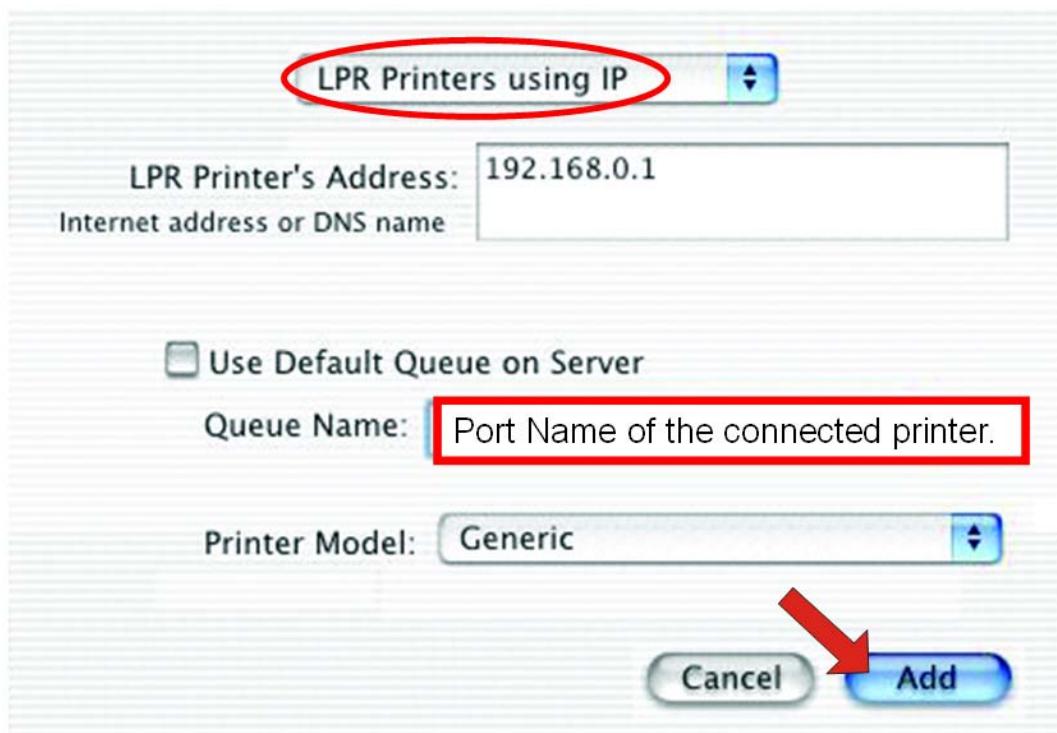


Step 5 Click **Add Printer** and then select the desired printing protocol (**AppleTalk** or **LPR Printers using IP**).



AppleTalk: After selecting **AppleTalk**, the Port Name of the Print Server will be displayed. Select the Port to which the PostScript printer is connected. Then, select the printer model from the dialog box. Click **Add Printer** to complete the Printer Port configuration. Select the Printer Port just configured in the Print window. Click **Print** to print your document.

LPR Printers using IP: When you select **LPR Printers using IP** Protocol, type the IP Address of the Print Server into the **LPR Printer's Address** field. In the **Queue Name** field, type in the Print Server's port name that the PostScript printer is connected to. Select the printer model from the dialog box, and select the printer model from the pull-down menu. Click **Add** to complete the process. Close all Print Center windows and select the Printer Port that was just selected. Then, click **Print** to print the document.



For Mac OS 9

If you use Mac OS 9, you can use the AppleTalk network protocol using the EtherTalk transport or a proprietary low-speed LocalTalk transport. Your Print Server can be used for network printing to PostScript printers. You can print from any Mac OS computer connected to your Ethernet network either directly using an EtherTalk connection or indirectly through a LocalTalk-to-EtherTalk router.

To set up the Print Server for AppleTalk printing:

Step 1 Please confirm that the AppleTalk protocol is enabled in your Macintosh computer.

Step 2 Change the IP Address on one of the computers within your network to **192.168.1.x** (where **x** is any number between 2 - 200).

Step 3 Type the Print Server's IP address into the address field of your web browser. (Default IP Address is **192.168.1.254**).

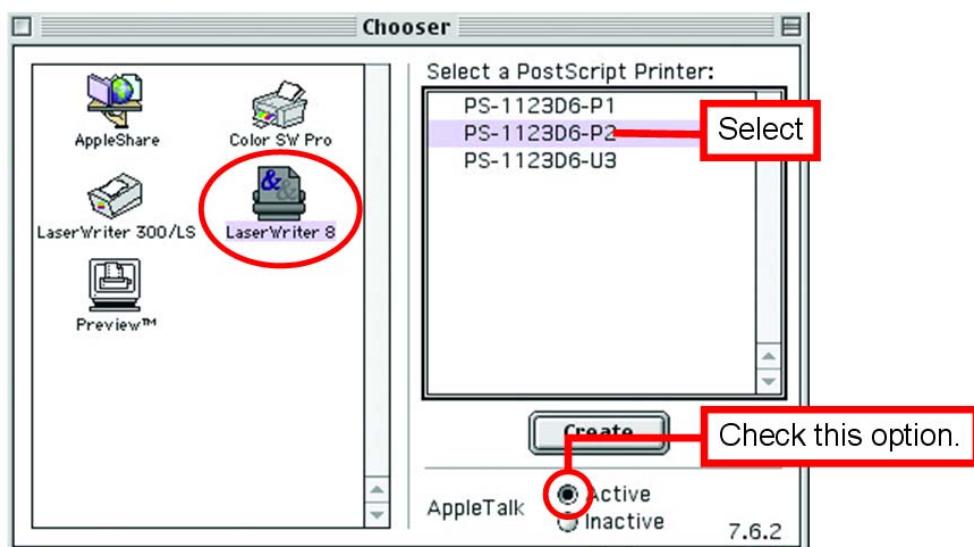
Step 4 Click on **Configuration** and go to the **AppleTalk Protocol** page. If your AppleTalk network is divided into AppleTalk zones, you have to specify which zone the Print Server should be in. You should locate the Print Server in the same zone as most of the users who will be using it. If your network is not divided into zones, it should contain a single asterisk “*”.

To print from Mac OS Client Workstations:

Note: The actual settings of selecting a PostScript printer connected to your Print Server may be different from the instructions provided below depending on the devices and the software you are using.

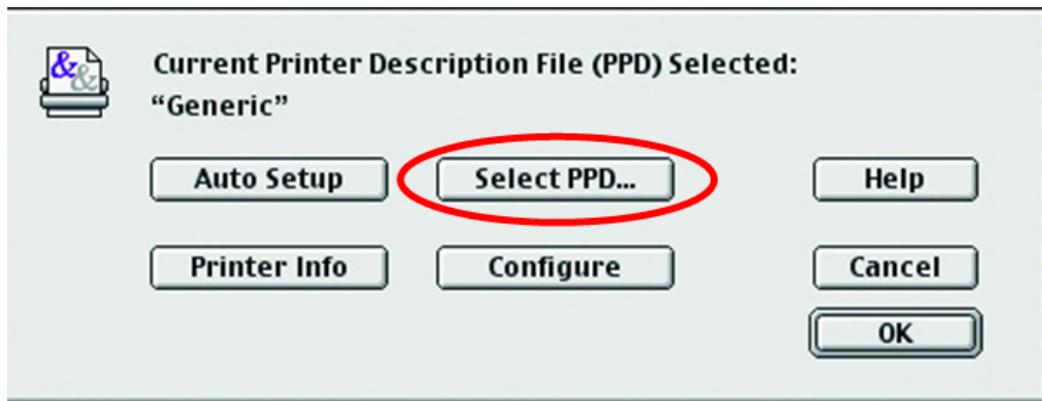
Step 1 Select **Chooser** from the Apple menu to choose a printer connected to the Print Server.

Step 2 In the left column of the **Chooser** window, select the desired printer. Please confirm that AppleTalk is set to **Active**. A list of all networked PostScript printers will be displayed within the right column.

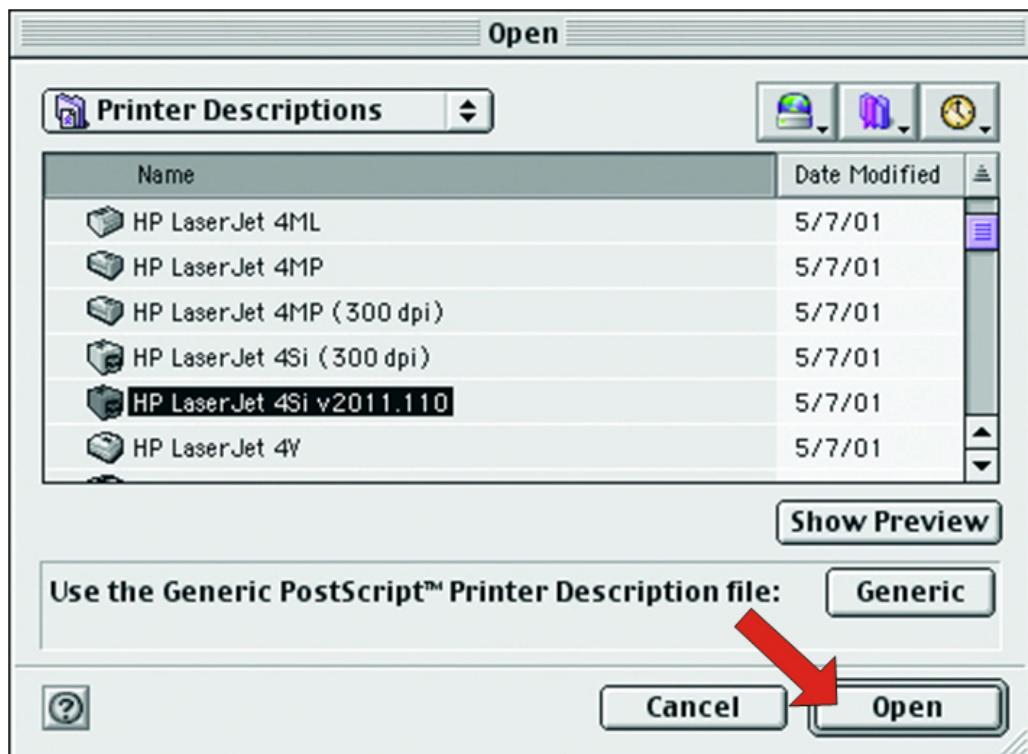


Step 3 Double-click the name of the **Printer Port** you wish to use.

Step 4 If you have not previously set this printer as the default printer, your computer will prompt you for a PostScript Printer Description file. Choose **Select PPD**.



Step 5 Select the appropriate printer description file for your printer. Click **Open**. (If your printer is not listed, click **Generic** to use a generic printer description).



The selected printer will become your computer's default printer. You may need to choose **Page Setup** in any application you have opened.

11. Product Specifications

Printer Connection

Printer Interface: One USB Port (Ver. 1.1), Two 25-pin Parallel Ports

Network Connection

Network Interface: RJ-45 connector for 10Base-T or 100Base-TX shielded

Network Standards: IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet

Network Data Transfer Rate: 10/100 Mbps

Network Protocols

Ethernet Frame Types: 802.2, 802.3, Ethernet II, SNAP (auto-switching)

Transport Protocols: TCP/IP, NetBEUI, AppleTalk

TCP/IP Protocols Supported: BOOTP, SNMP, Telnet, TFTP, FTP, LPD, RARP, DHCP

Management and Diagnostics

Standard: SNMP

MIBs: MIB-II (RFC 1213)

Diagnostic LED Indicators: Power, Link/Act, USB, LPT1, LPT2

Environmental and Physical

Power Supply: External power supply providing 5VDC input

Dimensions: 193 mm x 117 mm x 34 mm

Weight: Appx. 300 g

Operating Temperature: 0 degree C to 50 degree C (32 to 122 F)

Storage Temperature: -25 degree C to 55 degree C (-13 to 131 F)

Humidity: 5% to 95%, non-condensing

Emissions: FCC Class B, CE Class B

12. Appendix

Technical Support

E-mail: support@airlink101.com

Toll Free: 1-888-746-3238

Web site: www.airlink101.com

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